

CLAIMS

We claim:

1. A peptide comprising an amino acid sequence selected from the group consisting of SEQ ID 1; SEQ ID 2; SEQ ID 3; SEQ ID 4; and SEQ ID 5.
2. The peptide of Claim 1, wherein a threonine residue is glycosylated.
3. The peptide of Claim 1, wherein a threonine is substituted with an amino acid selected from the group consisting of serine; lysine; glutamic acid; asparagine; aspartic acid; and glutamine.
4. The peptide of Claim 2, wherein a threonine is substituted with an amino acid selected from the group consisting of serine; lysine; glutamic acid; asparagine; aspartic acid; and glutamine.
5. The peptide of Claim 1, wherein an asparagine is substituted with an amino acid selected from the group consisting of aspartic acid; glutamic acid; and glycine.
6. The peptide of Claim 1, wherein a lysine is substituted with an amino acid selected from the group consisting of aspartic acid; glutamic acid; alanine; asparagine; glutamine; and arginine.
7. The peptide of Claim 1, wherein an alanine is substituted with an amino acid selected from the group consisting of leucine; phenylalanine; isoleucine; tryptophan; asparagine; glutamine; and valine.
8. The peptide of Claim 1, wherein a leucine is substituted with an amino acid selected from the group consisting of alanine; phenylalanine; isoleucine; tryptophan; tyrosine; and valine.
9. The peptide of Claim 1, wherein a glutamic acid is substituted with an amino acid selected from the group consisting of lysine; asparagine; arginine; aspartic acid; and glutamine.

10. The peptide of Claim 1, wherein a valine is substituted with an amino acid selected from the group consisting of alanine; phenylalanine; isoleucine; tryptophan; tyrosine; and leucine.
11. The peptide of Claim 1, wherein a hexose is attached to the threonine.
12. The peptide of Claim 2, wherein a hexosamine is attached to the threonine.
13. A method for treating immunosuppressive disease in an animal comprised of administering an effective dose of an immunoactive substance comprised of an immunomodulatory protein mimetic including a peptide selected from the group consisting of SEQ ID 1; SEQ ID 2; SEQ ID 3; SEQ ID 4; and SEQ ID 5, wherein a threonine is glycosylated; and wherein immune system activity is increased.
14. The method of claim 13, wherein the immunosuppressive disease is selected from a group consisting of cancer, AIDS, and influenza.
15. The method of claim 13, wherein phagocytosis is increased.
16. The method of claim 13, wherein the animal is a human.
17. A laboratory kit useful in increasing phagocytic activity of immune cells comprised of a protein mimetic including a peptide selected from the group consisting of SEQ ID 1; SEQ ID 2; SEQ ID 3; SEQ ID 4; and SEQ ID 5, wherein a threonine residue is glycosylated.
18. The laboratory kit of claim 17, wherein the phagocytic cells are monocytes.
19. The laboratory kit of claim 17, wherein the phagocytic cells are macrophages.